

REMARKS

The application has been amended and is believed to be in condition for allowance.

Claim 16 is new and is based on original claim 1. Claim 17 is based on claim 5.

Claims 1-2 are cancelled.

Claims 1 and 15 have been amended to include the recitations of claim 5, claim 5 being cancelled.

Figure 4 has been amended to translate the German word "Dichte" into "Density" and to add to the vertical axis the legend "Scaled Thickness". As disclosed by specification page 30, Figure 4 is a diagrammatic illustration of the density profile through the mineral wool product as fabricated, plotting for this purpose the local density as a function of the scaled thickness  $z$  of the mineral wool blanket.

Withdrawal of the drawing objection is therefore solicited.

The specification has been amended to refer to U.S. Patent NO. 6,675,445.

Claims 3 and 9 were amended to eliminate "cross-linked".

The claims were amended to remedy the stated bases of rejection under section 112, 2<sup>nd</sup> paragraph. Withdrawal of this rejection is therefore solicited.

AMENDMENTS TO THE DRAWINGS:

Figure 4 has been amended to translate the German word "Dichte" into "Density" and to add to the vertical axis the legend "Scaled Thickness".

Accordingly, all formal matters are believed to have been fully addressed.

Substantive Matters

The claims are believed to patentably recite the present inventive non-woven mineral wool blanket/mat.

Claims 3 and 15 stand rejected as anticipated by GOEDEN 4,746,560.

Claims 3 and 15 stand rejected as anticipated by KLOSE 4,917,750.

Claims 3 and 15 stand rejected as anticipated by WEBER et al. 4,940,629.

Claims 5, 6, 8 and 10-14 are rejected as obvious over GOEDEN.

Claims 5, 6, 8 and 10-14 are rejected as obvious over KLOSE.

Claims 5, 6, 8 and 10-14 are rejected as obvious over WEBER.

As now clearly recited, inventive non-woven mineral wool blanket/mat includes a symmetrical density distribution across a thickness of the product and has an increasing density from the middle to the outer edges.

None of the references teach or suggest such a non-woven product, especially with the recited density range of 4 to 70 kg/m<sup>3</sup>.

See that new claim 16 recites wherein "a density of the nonwoven product across the overall thickness ever increases from the middle of the nonwoven product to outer edges of the upper and lower portions (24a, 24b)".

Although KLOSE has a density gradient within individual layers, the clarified recitations are not satisfied or rendered obvious by KLOSE.

In order to arrive at the recited structure of the present invention, a fiberized mat must be cut and the two resulting layers deposited one onto the other such that the former upper surfaces of the original mat face each other in the final product. Only by thus a procedure can be recited structure be realized.

GOEDEN also does not teach the recited structure as discussed above. It is clear that GOEDEN cannot have the recited density distribution as any non-woven mineral fiber product using a fiberizer has a density gradient with the lower layer of the product deposited on the convey means being more densely arranged than the upper layers.

WEBER also does not teach the recited structure as discussed above. WEBER relates to a thermoplastic integral skin foam product with a high density between 50 and 500 kg/m<sup>3</sup>. Accordingly to column 2, lines 36-43, the integral skins disclosed contain from 2 to 50% per weight of reinforcing fibers in mat form. However, the resulting product is still not a

fiberized mineral wool blanket as claimed. Additonally, there is no indication in WEBER of any technique that would lead to the recited overall structure as claimed.

Since the references do not teach or suggest the inventive method that results in the inventive non-woven mineral wool mat/blanket, it is clear that none of these references can render obvious the claimed mat/blanket.

Reconsideration and allowance of all the claims are respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON



Roland E. Long, Jr., Reg. No. 41,949  
745 South 23<sup>rd</sup> Street  
Arlington, VA 22202  
Telephone (703) 521-2297  
Telefax (703) 685-0573  
(703) 979-4709

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**APPENDIX:**

The Appendix includes the following item(s):

- ☐ - a terminal disclaimer
- ☐ - a 37 CFR 1.132 Declaration
- ☐ - a new or amended Abstract of the Disclosure
- ☒ - a Replacement Sheet for Figure 4 of the drawings
- ☐ - a Substitute Specification and a marked-up copy of the originally-filed specification
- ☐ - a verified English translation of foreign priority document